McPherson County

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December - January 2019

Ag News

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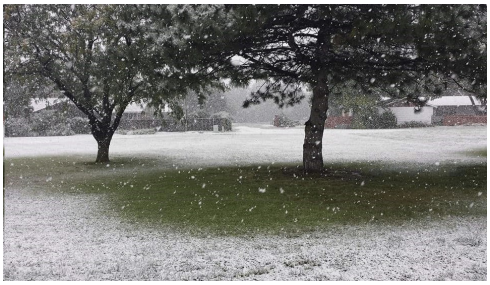


As winter temperatures are upon us, many of us in the production side of agriculture spend a lot more time in front of the computer in the confines of our warm offices during the winter months. Some of us have important outside chores still to do, but most of us spend more of our day inside getting our paper work caught up after a busy spring, summer and fall. Analyzing farm production numbers of our operations is a great way to reflect on the past year's accomplishments and to set goals for the upcoming year. Producers now, more than ever need to find ways to improve their efficiency. K-State Research and Extension has lots of programs to help the members in our community in these areas. One of the premier extension sites for information on the agricultural economy, is AgManager.info from Kansas State University. AgManager.infowebsite is a comprehensive source of information, analysis, and decision-making tools for agricultural producers, agribusinesses, and others. The site serves as a clearinghouse for applied outreach information emanating from the Department of Agricultural Economics at Kansas State University. It was created by combining departmental and faculty sites as well as creating new features exclusive to the AgManager.info site. The goal of this coordination is to improve the organization of web-based material and allow greater access for agricultural producers and other clientele.

Topics presented on the AgManager.info site include: crop and livestock marketing and outlook reports, crop insurance, farm management, agricultural policy, human resources, income tax and law, and agribusiness. Several topics include features that are updated weekly, encouraging repeat visits to the site. AgManager.info also contains decision-making tools, such as budget spreadsheets, and data sets that can encourage the agricultural industry to view AgManager.info as the most comprehensive and widely used university-sponsored website for applied research and economic outreach information. I challenge you to spend some time on one of these upcoming cold days exploring AgManager.info to see for yourself all the tools that we offer you to help meet your operations goals.

Office Hours Changes

Mondays..... 8:00 - 12:00 and 1:00 - 5:00 closed 12:00- 1:00 effective immediately
Tuesday-Friday..... 8:00 - 5:00

Holiday Office Hours

Thanksgiving:	Closed Thursday, November 28 & Friday, November 29
Christmas & New Years:	We will be closed Tuesday, December 24 through Wednesday, January 1

Considerations For Fall Applications of Anhydrous Ammonia

Soils across most of Kansas are now cool enough to allow producers to apply anhydrous ammonia for their 2020 corn crop as our average 4-inch soil temperatures was below 46 degrees during the middle of Nov. This practice has some appeal to producers. For one thing, fall fertilizer application spreads out the workload so there's more time to focus on corn planting in the spring. Secondly, wet conditions in the spring sometimes prevents producers from applying lower-cost anhydrous ammonia ahead of corn planting, and forces them to apply more expensive sources after planting. Equally important for many producers have been issues with anhydrous ammonia availability at times in the spring.
Despite those advantages, producers should be aware that there is potential for higher nitrogen (N) loss in the spring following a fall application, as a result of nitrification of the ammonium during late winter and very early spring and subsequent leaching, or denitrification**.**

Summary

The bottom line is this: If anhydrous ammonia is to be applied in the fall, there are a number of factors that must be considered, including soil texture, temperature, and soil moisture. Consider the following guidelines:

- Do not apply anhydrous ammonia in the fall on sandy soils.
- On silt loam or heavier-textured soils, wait to apply anhydrous ammonia until soil temperatures at the 4-inch depth are below 50 degrees F (records indicate in most years this will be in November).
- Use a nitrification inhibitor such as N-Serve with anhydrous ammonia to help reduce fall nitrification rates.
- To check the soil temperature in your area visit the K-State Research and Extension Weather Data Library at: http://mesonet.k-state.edu/agriculture/soiltemp/

What Producers Should Be Thinking About In January ……

BEEF -- *Tips by Dale Blasi, Extension Beef Specialist*

Cow herd management

* Historically, cull cow prices have increased during the next two or three months. Check your breakevens.
* Continue feeding or grazing programs started in early winter. Weather conditions may require wrapping up grain sorghum and cornstalk field grazing. Severe winter weather may begin to limit crop residue utilization, so be prepared to move to other grazing and feeding systems
* Supplement to achieve ideal BCS at calving.
* Use this formula to compare the basis of cost per lb. of crude protein (CP): Cost of supplement, $ per hundredweight (cwt.) ÷ (100 X % CP) = cost per lb. of CP.
* Use this formula to compare energy sources on basis of cost per lb. of TDN: Cost, $ per ton ÷ [2,000 X % dry matter (DM) X % TDN in DM] = cost per lb. of TDN.
* Control lice; external parasites could increase feed costs.
* Provide an adequate water supply. Depending on body size and stage of production, cattle need 5-11 gallons (gal.) of water per head per day, even in the coldest weather.
* Sort cows into management groups. BCS and age can be used as sorting criteria. If you must mix age groups, put thin and young cows together, and feed separately from the mature, properly conditioned cows.
* Use information from forage testing to divide forage supplies into quality lots. Higher-quality feedstuffs should be utilized for replacement females, younger cows, and thin cows that may lack condition and that may be more nutritionally stressed.
* Consult your veterinarian regarding pre- and post-partum vaccination schedules.
* Continue mineral supplementation. Vitamin A should be supplemented if cows are not grazing green forage.
* Plan to attend local, state, and regional educational and industry meetings.
* Develop replacement heifers properly. Weigh them now to calculate necessary average daily gain (ADG) to achieve target breeding weights. Target the heifers to weigh about 60%-65% of their mature weight by the start of the breeding season. Thin, lightweight heifers may need extra feed for 60-80 days to "flush" before breeding.
* Bull calves to be fed out and sold in the spring as yearlings should be well onto feed. Ultrasound measurements should be taken around one year of age and provided to your breed association.
* Provide some protection, such as a windbreak, during severe winter weather to reduce energy requirements. The LCT is the temperature at which a cow requires additional energy to simply maintain her current body weight and condition. The LCT for cattle varies with hair coat and body condition. Increase the amount of dietary energy provided 1% for each degree (including wind chill) below the LCT.

Winter Gardening Tips

Winterizing Roses

Though most shrub roses are hardy in Kansas, other types of roses can be more tender. For example, the hybrid teas have certain species in their ancestry that originated in the warm climate of southern China. These roses need protection to reliably survive Kansas winters. Mound soil or compost about 8 to 10 inches high around each plant. If using soil, bring it in from another part of the garden. Do not pull it from between plants because this can damage the rose roots or make them more susceptible to cold.

Mounding is normally finished by Thanksgiving. After the ground has frozen, add a 4-inch mulch of straw, leaves or hay for further protection. More soil may be spread on top of the mulch to keep it in place. Do not add the mulch before the ground freezes or mice may invade and feed on the roses over the winter. The purpose of these coverings is not only to moderate the cold, but also to prevent warm days during the winter or early spring from stimulating growth that is tender to returning cold weather. Excessively tall canes should be pruned to a height of 36 inches and tied together to prevent them from being whipped by strong winter winds. Wind can damage the crown of the plant or loosen the surrounding soil.

Next spring, remove coverings before new growth starts. If soil was used for mounding, remove from the area so that the level of soil stays constant from year to year. Wait until after the ground thaws, or the tops may begin growing before the roots can provide water.

Garden Soil Preparation — It's Not Too Late

Winter can still be a good time to add organic materials and till garden soils, as long as the soil isn't frozen. It is far wiser to till now than to wait until spring when cold, wet conditions can limit your ability to work soils easily. Working soil when it is wet destroys soil structure and results in hard clods that are very slow to break down. On the other hand, dry soil may need to be watered so it can be more easily tilled. Be sure to wait several days after watering to let soil moisture levels moderate. You want the soil moist, not wet or dry, when tilling.

There is a limit to how much organic material such as leaves can be added in one application. Normally, a layer 2 inches deep is adequate with 5 to 6 inches being the maximum that can be added at one time. Shredding the material before application encourages faster and more complete decomposition due to increased surface area. Remember, soil preparation is an important key to a successful garden.

Natural Needle Drop on Spruce, Arborvitae and Pines

We are seeing very noticeable natural needle drop on some evergreens such as arborvitae, pines and especially spruce. This is a process where 2- to 4-year-old interior needles turn yellow, then brown, and eventually drop off. Those who aren't familiar with this process often are concerned about the health of the tree. This is a natural phenomenon that occurs every year and does not hurt the tree. However, some years it is much more noticeable than others especially if trees have been under stress. In most summers, the stress is due to heat and drought but this year was likely due to too much rain restricting oxygen to the roots. Be sure to check that only the older needles are affected --the needles on the tips of the branches should look fine--and that there is no spotting or banding on the needles that are turning yellow.

Master Gardeners Spring Events

January 23	Insects in Gardening with Pam Paulsen
February 27	New Flowers & Vegetables for the Casual Gardener with Mike DeRee
March 26	Butterfly Garden with Katie Schmidt
April 23	Trees and Shrubs with Jason Graves
June 20	Master Gardener & Friends June Bloom Tour

Please plan to attend the first four Master Gardener & Friends programs at the Extension Office each one starting at 7:00 at the Extension Office Meeting Room. Bring your questions and hope to see you there. More information on the June Bloom Tour will be in the upcoming Extension newsletters.

Facts About Grazing Stocks

The amount of grain left in the field has been reduced considerably compared to historical levels through varietal and harvest equipment improvements. However, weather conditions can result in significant ear drop or plant lodging. Before grazing, scout fields to look for piles of grain on the ground and determine if there is over 8-10 bushels of grain on the ground. If so, management steps should be taken to remove these piles prior to turning out cattle on the residue. While sorghum grain is always processed prior to feeding to crack its tough shell coat, cattle can still founder on downed grain sorghum heads.

We know that plant components indicate any grain available would have the highest CP content followed by the leaves. The cob has the lowest protein and energy value. The stalk and husks have similar crude protein content, but more energy is available from the husks than the stalks due to the lower lignin content. In general, leaves from sorghum residue have higher CP content than corn leaves. The stalks of corn and sorghum are similar in CP, but digestibility is somewhat higher in sorghum than corn.

Duration of grazing
To ensure adequate residue remains on the field after grazing, we can use animal weight and grain yield to determine the amount of grazing available. Cattle will readily remove approximately 15% of the residue (leaves and husk), but can be forced to remove more if desired. The goal should be to leave at least ½ of the total amount of residue on the field.
If an irrigated corn yield is 180 bu/acre, a rule of thumb is to divide by 3.5 to get grazing days for a 1200-pound cow. In this case, 180 bu/acre corn residue should provide approximately 51 days of grazing (180/3.5 = 51) for a 1200 lb cow. The harvest index (grain production/total biomass) is similar for both corn and grain sorghum (1.6%). So an 85 bus/acre dryland sorghum divided by 3.5, would provide approximately 24 days of grazing (85/3.5 = 24). A lactating cow or a heavier cow will consume more dry matter and the days of grazing would be adjusted downward.

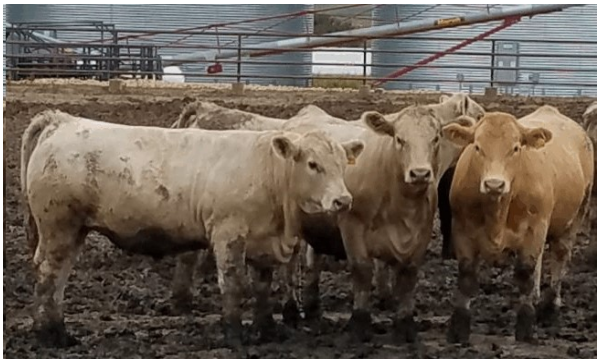
Selective grazing
Cattle will selectively graze the crop residue, eating the highest quality portions first, grain then leaves and husks. Depending on the stalking rate, amount of grain available, and nutrient demands of the cows, no energy or protein supplementation may be needed early in the grazing period for dry cows with a body condition score of 5 or more and grazing as described above. Weathering and trampling will decrease quality over time and this loss is greater with moisture and high humidity.

Soil compaction considerations
Cattle will cause soil compaction in paths leading to and around a water source. These compacted areas will only be surface compaction in the top 2-inches of soil. These compacted areas can be remedied by shallow tillage or spreading manure on the trafficked area if no-till is used. Results on soil compaction from grazing have shown mixed results. A study near Bushland, TX found surface compaction in a no-till system reduced crop yield after several years of grazing. While grazing studies from Nebraska found no increase in compaction and increased crop yield. Studies from western Kansas found compaction to only occur in the top two inches when grazing occurred on wet soils and shallow tillage removed any compaction. Compaction will be less on frozen, dry, sandy soils. It is best to remove cattle from the field to a nearby perennial pasture if the field is wet and not frozen. Also, the producer should be open to using shallow tillage should compaction occur.

Nutrient removal from grazing
Another common concern about grazing residue is nutrient removal. Nutrient removal will vary by the type of animal, with a growing calf requiring more nitrogen than a mature dry cow. Dry cows will typically be used to graze residue, which will remove between 1 and 2 lbs of N per acre (depending on crop yield) and few other nutrients. Crop residue is low in phosphorus (P); thus producers will likely supply a free-choice mineral, resulting in an increase in the amount of P and calcium left in the field. Wind will blow leaves and husks blow off fields, but manure remains in place.

Annual Cow-Calf School

February 20, 2020
6:00 p.m.
Steak dinner
4-H Building, 710 West Woodside, McPherson KS



Make plans now to attend the Annual Cow-Calf to be held on February 20 starting at 6:00 with a steak dinner and program to follow. Be watching for more details in future Extension newsletters.